UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,849	05/02/2001	Alejandro Schwartzman	CISCP203	5618

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EXAMINER
USTARIS, JOSEPH G

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/846,849	SCHWARTZMAN ET AL.
	Examiner	Art Unit	
	Joseph G. Ustaris	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 August 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-63</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-63</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>02 May 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 11,

2007 has been entered.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

> When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

> In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and

the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

3.   Claims 23-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 23 defines a program providing medium embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed program providing medium can range from paper on which the program is written, to a program simply contemplated and memorized by a person. Furthermore, the claims need to show a functional interrelationship between program and system (e.g. the program is executed). The examiner suggests amending the claim to embody (e.g. encoding) the program on "computer-readable medium" that is executed or equivalent in order to make the claim statutory. The examiner suggests that applicant consider modifying the language of claim 23. The examiner suggests the phrase "A computer readable medium embodied with computer code that is executed..." instead of "A computer readable medium comprising computer code...".

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 2, 4-7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al. (US005883901A) in view of Burke et al. (US006233235B1), Sawyer et al. (US006765925B1), and Hillman et al (US006522265B1).

Regarding claim 1, Chiu et al. (Chiu) discloses a system for disabling and enabling receiver circuitry in a cable modem connected to a headend in a cable modem network (See Fig. 1; column 5 lines 20-34, column 11 lines 44-54, and column 12 lines 45-51). The signal conversion system (SCS) at the headend "transmits a first message with first instructions from the headend to the cable modem to disable the cable modem receiver circuitry" (See column 12 lines 45-51). The SCS of the headend "sets an indication of the cable modem receiver circuitry state to disabled" within the control frame subtype (See column 11 lines 44-54 and column 12 lines 45-51). Furthermore, the SCS at the headend can "transmit a second message with second instructions from the headend to enable the cable modem receiver circuitry" (See column 12 lines 45-51). The SCS of the headend also "sets the indication of the cable modem receiver circuitry state to enabled" within the control frame subtype (See column 11 lines 44-54 and column 12 lines 45-51). However, Chiu does not explicitly disclose (1) disabling the cable modem for periodic intervals separated by activation windows, (2) maintaining at the headend an indication of cable modem receiver circuitry state, and (3) wherein

activation window length is varied based on drift between a cable modem clock and a headend clock.

(1) Burke et al. (Burke) discloses a cable modem system that is able to control cable modems and perform power management (See Fig. 1). The control server at the headend is able to disable the cable modem receiver for periodic intervals (e.g. the cable modem is disabled anytime outside its assigned group alert phase) separated by activation windows (e.g. the cable modem may be activated during its assigned group alert phase) (See Figs. 3, 7, and 8; column 7 line 57 – column 8 line 52). A group alert message or "second message" is processed when received within the "activation window". Furthermore, the headend is configured to identify the activation window (e.g. the assigned group alert phase) corresponding to the time the cable modem receiver circuitry is enabled (e.g. when the cable modem will be awake) prior to transmitting the second message (e.g. group alert message) during the activation window since the control server or headend assigned the cable modems their group alert phase when the cable modems registered themselves with the control server or headend (See Figs. 3, 7, and 8; column 7 line 57 – column 8 line 52). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the SCS at the headend and cable modem disclosed by Chiu to be able to disable the cable modem for periodic intervals where any message received during a period outside the activation window is ignored, as taught by Burke, in order to provide a more efficient means of controlling the state of the cable modem thereby providing a better power management system that reduces the power consumption (See column 6 lines 25-30).

(2) Sawyer et al. (Sawyer) discloses a system and method of maintaining state information in a data transmission system with cable modems. Sawyer discloses that the CMTS stores state information for each cable modem. The state information includes information pertaining to the state of communications between the CMTS and the cable modem (e.g. the channel the cable modem is using) or "maintaining at the headend an indication of cable modem receiver circuitry state" (See col. 1 line 42 – col. 2 line 35). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the headend/CMTS to "maintain at the headend an indication of cable modem receiver circuitry state", as taught by Sawyer, in order to provide a central location and an efficient means of handling all state information of the cable modems.

(3) Burke discloses that the clocks of the cable modem and headend are synchronized (See col. 5 lines 46-57). However, Burke does not address the concern of when a cable modem misses the synchronization signal due to noise in the cable system or packet loss thereby causing clock drift between the cable modem and headend. Hillman et al. (Hillman) discloses a system that using a modem (See col. 9 lines 3-13). Hillman addresses the problem of when a modem misses the synchronization window. Hillman discloses an activation window length (e.g. the wake-up window length) is varied based on drift between a cable modem clock (e.g. receiver clock) and a headend clock (e.g. monitoring center clock) (See col. 17 line 52 – col. 18 line 29). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the modem disclosed by Chiu in view of Burke to

vary the length of an activation window based on drift between a cable modem clock

and a headend clock, as taught by Hillman, in order to reduce the drift between the

cable modem and headend clock thereby ensuring that the cable modem will not miss

its window (See col. 18 lines 6-11).

Regarding claim 2, the disable message is a "unicast SYNCH message", wherein

the message is directed to a particular cable modem (See column 8 lines 9-20 and

column 12 lines 45-51).

Regarding claim 4, the enable message is also a "unicast SYNCH message",

wherein the message is directed to a particular cable modem (See column 8 lines 9-20

and column 12 lines 45-51).

Regarding claim 5, Chiu in view of Burke, Sawyer, and Hillman discloses that

various time periods can be defined for when the receiver is enabled or disabled based

on the predetermined sleep interval (See Burke column 6 lines 30-35).

Official Notice is taken that is well known schedule an "activation window" for any

amount of time (e.g. 100 milliseconds). Therefore, it would have been obvious to one

with ordinary skill in the art at the time the invention was made to modify the "activation

window" disclosed by Chiu in view of Burke, Sawyer, and Hillman to be any amount of

time (e.g. 100 milliseconds) in order to provide more options for the system to protect

the access to the network.

Regarding claim 6, Chiu in view of Burke, Sawyer, and Hillman discloses that

various time periods can be defined for when the receiver is enabled or disabled based

on the predetermined sleep interval (See Burke column 6 lines 30-35).

Official Notice is taken that is well known schedule the "periodic intervals" for any

amount of time (e.g. 10 seconds). Therefore, it would have been obvious to one with

ordinary skill in the art at the time the invention was made to modify the "periodic

intervals" disclosed by Chiu in view of Burke, Sawyer, and Hillman to be any amount of

time (e.g. 10 seconds) in order to provide more options for the system to protect the

access to the network.

Regarding claim 7, when the cable modem is disabled for the "periodic intervals",

inherently received messages are ignored as discussed in claim 1 above.

Regarding claim 9, when the cable modem is disabled for the "periodic intervals",

inherently the transmitter circuitry is also disabled.

Regarding claim 10, inherently, when the cable modem is disabled, the

transmitter circuitry is also disabled as discussed in claim 9 above. Therefore, no

messages are transmitted from the cable modem to the headend.

6.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al.

(US005883901A) in view of Burke et al. (US006233235B1), Sawyer et al.

(US006765925B1), and Hillman et al (US006522265B1) as applied to claims 1, 2, 4-7,

9, and 10 above, and further in view of Brusaw (US005523781A).

Regarding claim 3, Chiu in view of Burke, Sawyer, and Hillman does not explicitly

disclose that the messages contain periodic intervals and activation window information.

Brusaw discloses a system for controlling a television by using control messages

(See column 3 line 63 – column 4 line 2). Brusaw discloses that the messages can

contain times or "periodic intervals and activation window information" of when certain

commands are to be executed (See column 10 line 66 – column 11 line 10). Therefore,

it would have been obvious to one with ordinary skill in the art at the time the invention

was made to modify the messages disclosed by Chiu in view of Burke, Sawyer, and

Hillman to include periodic intervals and activation window information, as taught by

Brusaw, in order to provide a more efficient means of transporting various commands

and command attributes to and from the headend and cable modem.

7.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al.

(US005883901A) in view of Burke et al. (US006233235B1), Sawyer et al.

(US006765925B1), and Hillman et al (US006522265B1) as applied to claims 1, 2, 4-7,

9, and 10 above, and further in view of Wall et al. (US 20030037160A1).

Regarding claim 8, Chiu in view of Burke, Sawyer, and Hillman does not disclose

that the cable modem ignores multicast messages during an "activation window".

Wall et al. (Wall) discloses a system that is able to control the entry of data to a

network environment. Wall discloses that some network nodes are configured to

automatically ignore multicast messages (See paragraph 0018). Therefore, it would

have been obvious to one with ordinary skill in the art at the time the invention was

made to modify the cable modem disclosed by Chiu in view of Burke, Sawyer, and

Hillman to be configured to ignore multicast messages, as taught by Wall, in order to

provide a more secure and bandwidth efficient connection to the network.

8.   Claims 11-19, 21-29, 31-34, 36-39, 41-50, 52-60, 62, and 63 are rejected under

35 U.S.C. 103(a) as being unpatentable over Chiu et al. (US005883901A) in view of

Burke et al. (US006233235B1) and Hillman et al (US006522265B1).

Regarding claim 11, Chiu et al. (Chiu) discloses a system for disabling and

enabling receiver circuitry in a cable modem connected to a headend in a cable modem

network (See Fig. 1; column 5 lines 20-34, column 11 lines 44-54, and column 12 lines

45-51). The signal conversion system (SCS) at the headend "transmits a first message

with first instructions from the headend to the cable modem to disable the cable modem

receiver circuitry" (See column 12 lines 45-51). The SCS of the headend "sets an

indication of the cable modem receiver circuitry state to disabled" within the control

frame subtype (See column 11 lines 44-54 and column 12 lines 45-51). Furthermore,

the SCS at the headend can "transmit a second message with second instructions from

the headend to enable the cable modem receiver circuitry" (See column 12 lines 45-51).

The SCS of the headend also "sets the indication of the cable modem receiver circuitry

state to enabled" within the control frame subtype (See column 11 lines 44-54 and

column 12 lines 45-51). Furthermore, the cable modem receives the commands and

disables/enables the cable modem according to the instructions within the messages.

However, Chiu does not disclose (1) disabling the cable modem for periodic intervals

separated by activation windows and (2) wherein activation window length is varied

based on drift between a cable modem clock and a headend clock.

(1) Burke et al. (Burke) discloses a cable modem system that is able to control

cable modems and perform power management (See Fig. 1). The control server at the

headend is able to disable the cable modem receiver for periodic intervals (e.g. the

cable modem is disabled anytime outside its assigned group alert phase) separated by

activation windows (e.g. the cable modem may be activated during its assigned group

alert phase) (See Figs. 3, 7, and 8; column 7 line 57 – column 8 line 52). A group alert

message or "second message" is processed when received within the "activation

window". Furthermore, the headend is configured to identify the activation window (e.g.

the assigned group alert phase) corresponding to the time the cable modem receiver

circuitry is enabled (e.g. when the cable modem will be awake) prior to transmitting the

second message (e.g. group alert message) during the activation window since the

control server or headend assigned the cable modems their group alert phase when the

cable modems registered themselves with the control server or headend (See Figs. 3,

7, and 8; column 7 line 57 – column 8 line 52). Therefore, it would have been obvious to

one with ordinary skill in the art at the time the invention was made to modify the SCS at

the headend and cable modem disclosed by Chiu to be able to disable the cable

modem for periodic intervals where any message received during a period outside the

activation window is ignored, as taught by Burke, in order to provide a more efficient

means of controlling the state of the cable modem thereby providing a better power

management system that reduces the power consumption (See column 6 lines 25-30).

(2) Burke discloses that the clocks of the cable modem and headend are

synchronized (See col. 5 lines 46-57). However, Burke does not address the concern of

when a cable modem misses the synchronization signal due to noise in the cable

system or packet loss thereby causing clock drift between the cable modem and

headend. Hillman et al. (Hillman) discloses a system that using a modem (See col. 9

lines 3-13). Hillman addresses the problem of when a modem misses the

synchronization window. Hillman discloses an activation window length (e.g. the wake-

up window length) is varied based on drift between a cable modem clock (e.g. receiver

clock) and a headend clock (e.g. monitoring center clock) (See col. 17 line 52 – col. 18

line 29). Therefore, it would have been obvious to one with ordinary skill in the art at the

time the invention was made to modify the modem disclosed by Chiu in view of Burke to

vary the length of an activation window based on drift between a cable modem clock

and a headend clock, as taught by Hillman, in order to reduce the drift between the

cable modem and headend clock thereby ensuring that the cable modem will not miss

its window (See col. 18 lines 6-11).

Regarding claim 12, the disable message is a "unicast SYNCH message",

wherein the message is directed to a particular cable modem (See column 8 lines 9-20

and column 12 lines 45-51).

Regarding claim 13, Chiu in view of Burke and Hillman discloses that the cable

modem has a tuner (See Fig. 3, tuner 303). However, Chiu in view of Burke and Hillman

does not explicitly disclose that the tuner includes an RF amplifier, a mixer, a phase lock

loop, and an IF amplifier.

Official Notice is taken that it is well known for tuners to include an RF amplifier,

a mixer, a phase lock loop, and an IF amplifier. Therefore, it would have been obvious

to one with ordinary skill in the art at the time the invention was made to modify the

tuner of the cable modem disclosed by Chiu in view of Burke and Hillman to include an

RF amplifier, a mixer, a phase lock loop, and an IF amplifier in order to provide a more efficient tuner thereby enhancing the performance of the tuner.

Regarding claim 14, the receiver further comprises a demodulator (See Chiu column 17 lines 7-10).

Regarding claim 15, the cable modem receiver further comprises one or more processors coupled with memory (See Chiu Fig. 3, microprocessor 302 and memory 309).

Regarding claim 16, the enable message is also a "unicast SYNCH message", wherein the message is directed to a particular cable modem (See column 8 lines 9-20 and column 12 lines 45-51).

Regarding claim 17, Chiu in view of Burke and Hillman discloses that various time periods can be defined for when the receiver is enabled or disabled based on the predetermined sleep interval (See Burke column 6 lines 30-35).

Official Notice is taken that is well known schedule an "activation window" for any amount of time (e.g. 100 milliseconds). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the "activation window" disclosed by Chiu in view of Burke and Hillman to be any amount of time (e.g. 100 milliseconds) in order to provide more options for the system to protect the access to the network.

Regarding claim 18, Chiu in view of Burke and Hillman discloses that various time periods can be defined for when the receiver is enabled or disabled based on the predetermined sleep interval (See Burke column 6 lines 30-35).

Official Notice is taken that is well known schedule the "periodic intervals" for any amount of time (e.g. 10 seconds). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the "periodic intervals" disclosed by Chiu in view of Burke to be any amount of time (e.g. 10 seconds) in order to provide more options for the system to protect the access to the network.

Regarding claim 19, when the cable modem is disabled for the "periodic intervals", inherently received messages are ignored as discussed in claim 1 above.

Regarding claim 21, when the cable modem is disabled for the "periodic intervals", inherently the transmitter circuitry is also disabled.

Regarding claim 22, inherently, when the cable modem is disabled, the transmitter circuitry is also disabled as discussed in claim 9 above. Therefore, no messages are transmitted from the cable modem to the headend.

Claim 23 contains the limitations of claim 11 (where inherently the SCS of the headend executes a computer program that has program instructions on a computer readable medium) and is analyzed as previously discussed with respect to that claim.

Claims 24-27 contains the limitations of claims 12 and 16-18 respectively and is analyzed as previously discussed with respect to those claims.

Claim 28 contains the limitations of claim 11 (wherein the headend transmits the messages) and is analyzed as previously discussed with respect to that claim. Furthermore, the headend has memory and one or more processors (See Chiu Fig. 2, CPU 209 and RAM).

Claims 29, 31-34, 36, and 37 contains the limitations of claims 12, 16-19, 21, and

22 respectively and is analyzed as previously discussed with respect to those claims.

Claim 38 contains the limitations of claim 11 (wherein the cable modem or

"apparatus" has a transmitter, memory, one or more processors, and a receiver (See

Chiu Fig. 3)) and is analyzed as previously discussed with respect to that claim.

Claims 39 and 41-44 contains the limitations of claims 12, 16, and 13-15

respectively and is analyzed as previously discussed with respect to those claims.

Claim 45 contains the limitations of claims 11 and is analyzed as previously

discussed with respect to that claim.

Claims 46-50, 52, and 53 contains the limitations of claims 12, 16-19, 21, and 22

respectively and is analyzed as previously discussed with respect to those claims.

Claim 54 contains the limitations of claim 11 and is analyzed as previously

discussed with respect to that claim.

Claims 55-60, 62, and 63 contains the limitations of claims 12-16, 19, 21, and 22

respectively and is analyzed as previously discussed with respect to those claims.

9.   Claims 20, 35, 51, and 61 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chiu et al. (US005883901A) in view of Burke et al.

(US006233235B1) and Hillman et al (US006522265B1) as applied to claims 11-19, 21-

29, 31-34, 36-39, 41-50, 52-60, 62, and 63 above, and further in view of Wall et al. (US

20030037160A1).

Regarding claim 20, Chiu in view of Burke and Hillman does not disclose that the cable modem ignores multicast messages during an "activation window".

Wall et al. (Wall) discloses a system that is able to control the entry of data to a network environment. Wall discloses that some network nodes are configured to automatically ignore multicast messages (See paragraph 0018). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the cable modem disclosed by Chiu in view of Burke and Hillman to be configured to ignore multicast messages, as taught by Wall, in order to provide a more secure and bandwidth efficient connection to the network.

Claims 35, 51, and 61 contains the limitations of claim 20 respectively and is analyzed as previously discussed with respect to that claim.

10.   Claims 30 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al. (US005883901A) in view of Burke et al. (US006233235B1) and Hillman et al (US006522265B1) as applied to claims 11-19, 21-29, 31-34, 36-39, 41-50, 52-60, 62, and 63 above, and further in view of Brusaw (US005523781A).

Regarding claim 30, Chiu in view of Burke and Hillman does not explicitly disclose that the messages contain periodic intervals and activation window information.

Brusaw discloses a system for controlling a television by using control messages (See column 3 line 63 – column 4 line 2). Brusaw discloses that the messages can contain times or "periodic intervals and activation window information" of when certain commands are to be executed (See column 10 line 66 – column 11 line 10). Therefore,

it would have been obvious to one with ordinary skill in the art at the time the invention

was made to modify the messages disclosed by Chiu in view of Burke and Hillman to

include periodic intervals and activation window information, as taught by Brusaw, in

order to provide a more efficient means of transporting various commands and

command attributes to and from the headend and cable modem.

Claim 40 contains the limitations of claims 30 and 39 and is analyzed as

previously discussed with respect to those claims.

Response to Arguments

11.   Applicant's arguments filed July 11, 2007 have been fully considered but they are

not persuasive.

Applicant argues with respects to claims 1-63 that Chiu, Burke, Sawyer, and

Hillman do not disclose varying the activation window length based on the drift between

a cable modem clock and a headend clock. However, reading the claims in the broadest

sense, Chiu in view of Burke, Sawyer, and Hillman does meet that limitation in the

claims. Hillman does disclose a modem network (See Figs. 1 and 4; col. 9 lines 3-13),

wherein Hillman discloses that the system modulates and demodulates data on a carrier

frequency much like cable modems. Furthermore, anyone skill in the art would

recognize that any network is susceptible to noise thereby causing clock drifts between

devices. Hillman addresses this problem by providing a solution to reduce the amount of

drift between clocks. Hillman discloses an activation window length (e.g. the wake-up

window) is varied based on drift between a cable modem (e.g. receiver clock) and a

headend clock (e.g. monitoring center clock) (See col. 17 line 52 – col. 18 line 29).

Applicant is reminded that although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re*

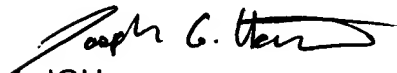*Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-

7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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